10/ 546, 624 Rec'd PCT/PTO 11 JAN 2006

#### PATENT COOPERATION TREATY

# Translation

# **PCT**

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

| Applicant's or agent's file reference  | T :   |   |  |  |  |  |  |  |
|--|---|---|--|--|--|--|--|--|
| 03040 HB   | FOR FURTHER ACTION  | See Form PCT/IPEA/416   |  |  |  |  |  |  |
| International application No.  | International filing date (day/month/year)  | Priority date (day/month/year)  |  |  |  |  |  |  |
| PCT/EP2004/001830  | 25.02.2004  | 25.02.2003  |  |  |  |  |  |  |
| International Patent Classification (IPC) or nat   | ional classification and IPC  |   |  |  |  |  |  |  |
| C23C 22/68, 22/50, 22/53, 22/83, C09D 5/08   |   |   |  |  |  |  |  |  |
| Applicant  |   |   |  |  |  |  |  |  |
| CHEMETALL GMBH   |   |   |  |  |  |  |  |  |
| This report is the international preli<br>under Article 35 and transmitted to the  | <ol> <li>This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</li> </ol>                     |   |  |  |  |  |  |  |
| 2. This REPORT consists of a total of  | 4 sheets, inclu   | ding this cover sheet.  |  |  |  |  |  |  |
| <ol> <li>This report is also accompanied by A</li> </ol>   |   |   |  |  |  |  |  |  |
| a. Sent to the applicant and   | i to the International Bureau) a total of 14  | J   |  |  |  |  |  |  |
| sheets of the descri   | ption, claims and/or drawings which have be   | en amended and are the basis for this report and/or   |  |  |  |  |  |  |
| sheets containing re<br>Instructions).   | sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). |   |  |  |  |  |  |  |
| sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental |   |   |  |  |  |  |  |  |
| Box.   |   | to be seemed to be a |  |  |  |  |  |  |
| b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))  |   |   |  |  |  |  |  |  |
| , containing a sequence listing and/or tables  |   |   |  |  |  |  |  |  |
| related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).   |   |   |  |  |  |  |  |  |
| <ol> <li>This report contains indications relat</li> </ol>   | ing to the following items:   | RRECTED   |  |  |  |  |  |  |
| Box No. I Basis of the   | e report  |   |  |  |  |  |  |  |
| Box No. II Priority  |   | ERSION .  |  |  |  |  |  |  |
| Box No. III Non-estable  | ishment of opinion with regard to novelty, inv  | ventive step and industrial applicability   |  |  |  |  |  |  |
| Box No. IV Lack of uni   | ity of invention  |   |  |  |  |  |  |  |
| Box No. V Reasoned s   | Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement   |   |  |  |  |  |  |  |
| Box No. VI Certain doc   | cuments cited   |   |  |  |  |  |  |  |
| Box No. VII Certain def  | Box No. VII Certain defects in the international application  |   |  |  |  |  |  |  |
| Box No. VIII Certain observations on the international application   |   |   |  |  |  |  |  |  |
| Date of submission of the demand  Date of completion of this report  |   |   |  |  |  |  |  |  |
|  |   | **************************************  |  |  |  |  |  |  |
| Name and mailing address of the IPEA/  | Authorized officer  | Authorized officer  |  |  |  |  |  |  |
|  |   |   |  |  |  |  |  |  |
|  | İ   |   |  |  |  |  |  |  |
| Facsimile No.  | Telephone No.   |   |  |  |  |  |  |  |

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/001830

| Box | No. I   | Basis of the report  |  |   |  |  |
|-----|---|--|--|---|--|--|
| 1.  | With<br>indic   | regard to the language, this report is based on the internatic<br>cated under this item.   | onal application in the language in                                | which it was filed, unless otherwise                          |  |  |
|     |   | This report is based on translations from the original language which is the language of a translation furnished for the purpose.  | age into the following language _<br>coses of:                     | •   |  |  |
|     |   | international search (Rule 12.3 and 23.1(b))   |  |   |  |  |
|     |   | publication of the international application (Rule 12.4  |  |   |  |  |
|     | *****   | international preliminary examination (Rule 55.2 and   |  |   |  |  |
| 2.  | With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report): |  |  |   |  |  |
|     | Ц   | the international application as originally filed/furnished  |  |   |  |  |
|     | $\boxtimes$   | the description:   |  |   |  |  |
|     |   | pages _1, 2, 6-35  |  | as originally filed/furnished                                 |  |  |
|     |   | pages* _ 3-5, 5a   | received by this Authority on                                      | 24.12.2004 with the letter of 14.12.2004                      |  |  |
|     |   | pages*   | ,  |   |  |  |
|     | $\boxtimes$   | the claims:  | •  |   |  |  |
|     |   | nos.   |  |   |  |  |
|     |   | nos.*  |  | as originally filed/furnished                                 |  |  |
|     |   | nos.* 1-27   |  | 24.12.2004 with the   |  |  |
|     |   | nos.*  |  | letter of 14.12.2004  |  |  |
|     | П   | the drawings:  | . received by this Authority on                                    |   |  |  |
|     |   | sheets   |  |   |  |  |
|     |   | chaota   |  | as originally filed/furnished                                 |  |  |
|     |   | sheets*  |  |   |  |  |
|     |   |  | received by this Authority on                                      |   |  |  |
|     |   | a sequence listing and/or any related table(s) - see Supplem   | ental Box Relating to Sequence L                                   | isting.   |  |  |
| 3.  | اللا  | The amendments have resulted in the cancellation of:   |  |   |  |  |
|     |   | the description, pages   |  |   |  |  |
|     |   | the claims, nos.   |  | ·····   |  |  |
|     | ļ   | the drawings, sheets/figs  |  |   |  |  |
|     |   | the sequence listing (specify):  | ·  |   |  |  |
|     |   | 1  |  |   |  |  |
| 4.  |   | This report has been established as if (some of) the amendathey have been considered to go beyond the disclosure as file   | ments annexed to this report and ed, as indicated in the Supplemen | listed below had not been made, since tal Box (Rule 70.2(c)). |  |  |
|     | ļ   | the description, pages   |  |   |  |  |
|     | إ   | the claims, nos.   |  |   |  |  |
|     | [   | the drawings, sheets/figs  |  |   |  |  |
|     | Į   | the sequence listing (specify):  |  |   |  |  |
|     |   | American transfer and the second seco |  |   |  |  |
| *   | If iten   | 1 4 applies, some or all of those sheets may be marked "supe   | rseded."   |   |  |  |

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/001830

| Bo | x No. V      | Reasoned stateme citations and expl | nt under Ai | rticle 35(2) with regard to novelty, inventive step or industrial applicability; |       |
|----|--------------|-------------------------------------|-------------|--|-------|
| 1. | Statement    |                                     |             |  |       |
|    | Novelty (1   | 4)                                  | Claims      | 1-27   | _ YES |
|    |              |                                     | Claims      |  | NO    |
|    | Inventive :  | step (IS)                           | Claims      | 1-27   | YES   |
|    |              |                                     | Claims      |  | _ NO  |
|    | Industrial a | applicability (IA)                  | Claims      | 1-27   | YES   |
|    |              |                                     | Claims      |  | _ ио  |
|    |              |                                     |             |  |       |

- 2. Citations and explanations (Rule 70.7)
  - 1. Reference is made to the following documents:

D4: EP-A-1 130 132 (NIPPON PAINT CO LTD),

5 September 2001 (2001-09-05)

D5: DE 31 51 115 A (NIPPON KOKAN KK),

2 September 1982 (1982-09-02)

 Documents D4 and D5 are both considered, to an equal extent, to be the closest prior art for the subject matter of claims 1 to 27.

Documents D4 and D5 disclose coating compositions and rinsing solutions that contain a film-forming agent, a metal chelate, a silane and silicic acid (see the claims in both documents).

The subject matter of claims 1 to 27 is novel over the disclosures of D4 and D5 (PCT Article 33(2)) because neither of these documents disclose the use of fluorine-containing silanes with fluorine-free silanes.

3.1 The problem solved by claims 1 to 27 can be seen as that of providing coating and rinsing processes which

#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/001830

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

ensure improved corrosion protection. The examples show that the problem is solved by the use of fluorine-containing silanes together with fluorine-free silanes.

There is nothing in the prior art to suggest that this problem might be solved by use of fluorine-containing silanes together with fluorine-free silanes. The subject matter of claims 1 to 27 is therefore non-obvious and inventive (PCT Article 33(3)).